

BRITISH COLUMBIAN RECORDS OF CARABIDÆ
AND HYDROPHILIDÆ¹

(Coleoptera)

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A number of the records here given are additions to the Provincial list, and as several of the species have been introduced, their captures are of interest in supplementing recent papers by Hatch (5, 6) and Blackwelder (1).

CARABIDÆ

GEHRINGIA OLYMPICA Darl.

This species, recently described by Darlington (4) as from near Sol Duc Hot Springs, Olympic Mts., Washington State, and Glacier Park, Montana, has turned up at Stanley, 17.VI.'32 (K. Graham) and at Fernie, 25.VII.'34 (H. Leech). Taken by throwing water onto gravel bars. The identification has been verified by Mr. Fall.

CARABUS NEMORALIS Mull.

I have not seen a specimen from this province carrying a date earlier than that of 1923. The species does not occur in the lists of Taylor (8, 9) or Wickham (12). Mr. A. W. Hanham of Duncan collected at Victoria from 1901 to 1906 but did not find *nemoralis* Mull., while Mr. W. Downes made special efforts to add to the Carabid records there in 1917, 1918, and 1920, but did not take this species.

In the collection (now at the University of Illinois) of the late K. F. Auden, *C. nemoralis* Mull. is represented as follows (all collected by Auden):

1, Victoria, 6.VII.'23; 9, Victoria, 15.III.'24; 2, Victoria, 16.III.'24; 1, Victoria, 17.III.'24; 1, Vancouver, 25.II.'24; 2, Vancouver, April, 1925; 1, Vancouver, 12.V.'25; 1, Vancouver, 25.V.'25.

There are also specimens of Auden's Victoria (17.III.'24) series in Mr. Hopping's collection.

By 1926 the species was very abundant over much of Vancouver, and in 1929 had begun to enter the University area of Point Grey. I have seen specimens from Port Haney, about

¹ Contribution from the Division of Forest Insects, Entomological Branch, Department of Agriculture, Ottawa, Canada.

twenty miles up the north bank of the Fraser River from New Westminster; but it has not yet reached Agassiz, sixty miles up river, according to Mr. R. Glendenning of the Dominion Entomological Laboratory there. In fact I have no record of *nemoralis* having been taken on the south side of the Fraser valley.

The only records from the interior of the province are from Salmon Arm, which is by railroad rather more than 350 miles from Vancouver. This district is over a slight height of land from the north end of the Okanagan Valley, and, with an annual precipitation of about 18 inches, is just out of the dry-belt region. *C. nemoralis* Mull. was first taken on 2.V.'33 (C. G. Smith) and on 12.IV.'34, I caught a very fresh male running along the sidewalk under a street light. Additional specimens of both sexes have been taken, and the species seems to be well established. It is probable that freight cars, especially of the open cattle-car type, were the means of the beetles spreading so far inland; Salmon Arm is on the main line of the Canadian Pacific Railway.

Two places which are in direct and constant boat communication with Victoria and Vancouver, are Nanimo and Prince Rupert; but no *nemoralis* have been recorded from either locality. Nor did Carr (3) find it in northern Alberta.

PTEROSTICHUS (LEPTOFERONIA) LONGICOLLIS Lec.

Duncan and Haney (Leech Coll.) Determined by Dr. Van Dyke.

PTEROSTICHUS (OMASEUS) VULGARIS L.

Victoria, 23.VIII.'33 (Downes); Vancouver, May, 1931, 10.X.'32, 22.X.'32, (Leech). An introduced species.

PTEROSTICHUS (MELANIUS) CAUDICALIS Say.

Creston, Wynndel (Stace-Smith); Oliver (Auden). The identifications of this and the four species following have been verified by Mr. Alan Nicolay.

PTEROSTICHUS (MELANIUS) LUCTUOSUS Dej.

Pender Harbor, Oyama, Vernon, Oliver (Hopping coll.); Salmon Arm, White Lake (Leech coll.).

PTEROSTICHUS (MELANIUS) CORVINUS Dej.

Okanagan Falls, Osoyoos (Hopping).

PTEROSTICHUS (DYSIDIUS) MUTUS Say.

Pender Harbor, Mara (Hopping coll.); Agassiz, Salmon Arm (Leech coll.).

PLATYSMATUS NITIDUM Kby.

Osoyoos, Oliver (Hopping coll.); Salmon Arm (Leech coll.).

STEREOCERUS HÆMATOPUS Dej.

A single example carrying the label: "Just N. of Ft. St. James, B. C., 3.V.'32 (H. S. Fowler)." Leech collection. Leng apparently does not follow Buchanan's suggestion (2) that *Stereocerus* be removed from the *Amarini* to the *Pterostichini*.

LÆMOSTHENUS (PRISTONYCHUS) COMPLANATUS Dej.

One specimen, Victoria, 12.VII.'30 (E. E. Peden) Leech coll. Determined by Dr. Van Dyke who says that it is "a species of southwestern Europe, introduced along the western coast of both North and South America by the Spaniards over a hundred years ago. It has been gradually extending its range along our coast within recent years."

PLATYNUS HARDYI Lec.

Vancouver, 28.VI.'33 (Leech). Determined by Mr. Fall, who remarks that he does not know of any records of the species having been taken between B. C. and the Maritime provinces.

PLATYNUS (PARAGONUM) BELLERI Hatch

This recently described species (6) has been taken on sphagnum at the edge of a small lake at Steelhead, 5.VII,'34 (K. Graham). The specimens vary above from shining æneous to absolutely black.

HARPALUS WASHINGTONENSIS Van D.

Identified by Dr. Van Dyke, who recorded a specimen from Nanaimo in his original description (10). Examples in the Hopping and Leech collections are from Cowichan Lake, Pender Harbor, Vancouver and Steelhead.

HYDROPHILIDÆ

SPHÆRIDIDIUM BIPUSTULATUM F.

First noted in 1931, at Vancouver and Salmon Arm. This species has become very common at the latter place, where it now almost outnumbered *scarabæoides* L. It is highly probable that the constant hauling of cattle in open railway cars is a major factor in distributing certain species of *Sphaeridium*, *Cercyon*, and *Aphodius* in Western Canada.

SPHÆRIDIDIUM SCARABÆOIDES L.

Common throughout the southern portion of B. C. This species is exceedingly numerous in cow and horse dung, while *bipustulatum* F. is usually taken on the wing.

CERCYON UNIPUNCTATUS L.

Salmon Arm; not rare; March to May, when it can be taken in flight in barnyards.

CERCYON QUISQUILIUS L.

Very common. Salmon Arm, Vancouver, Vernon.

CERCYON PRÆTEXTATUS Say

Rare. Peachland (Wallis, 11).

CERCYON ADUMBRATUM Mann.

Steelhead, May, in human faeces. Determined by Mr. Fall who says that these specimens, with the elytral intervals distinctly punctate, are identical with examples of *adumbratum* in the Leconte collection, which were sent by Mannerheim himself.

CERCYON ANALIS Payk.

Vancouver, Steelhead, Salmon Arm (Leech coll.). Pender Harbor (Hopping coll.). Taken under rotted straw in March, and flying in April, at Salmon Arm. Vancouver examples are dated February and March. The identification has been verified by Mr. Fall. Blackwelder apparently missed Keen's record (7) in preparing his paper on the species of the Pacific Coast.

MEGASTERNUM POSTICATUM Mann.

Vancouver, Steelhead, Pender Harbor.

CRYPTOPLEURUM MINUTUM Fab.

Duncan, Mara, Sugar Lake, Merritt (Hopping); Steelhead, Vancouver, Salmon Arm, Fernie (Leech).

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